

Amendments to Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

What is Claimed:

1. (Currently Amended) A method of determining network conditions, the method comprising:

~~determining a transmission time equal to a clock-first time minus a time stamp associated with receipt of a first [a]data packet;~~

~~subtracting a base time from the transmission time to determine a transmission latency; and~~

~~modifying the base time in response to the transmission latency being less than zero.~~

determining a second time associated with receipt of a second data packet sent immediately after the first data packet;

determining a size of the second data packet; and

calculating a transmission bandwidth by dividing the size of the second data packet by a function of a difference between the first and second times.

2. (Currently Amended) The method of claim 1, ~~wherein determining the transmission time includes~~ further comprising:

reading a header in the first data packet, wherein the header includes data indicating the second data packet will be transmitted immediately after transmission of the first data packet to make the first and second data packets back-to-back data packets, reading the timestamp included in the data packet, wherein the timestamp includes the time that the data packet was sent; and

~~modifying the time of the timestamp to account for any clock skew.~~

3. (Currently Amended) The method of claim 1, additionally comprising reporting to a ~~software module~~ server computer the ~~transmission latency~~ bandwidth.

4. (Currently Amended) The method of claim 1, wherein the data packets ~~are two~~ is one of a plurality of data packets that collectively comprise a portion of a media presentation rendered to a user.

5. (Currently Amended) The method of claim ~~[[4]]~~ 1, wherein the ~~plurality of data packets are received via a modem function of the difference between the first and second times is the time interval between the first and second times plus a correction factor selected as a function of the size of the second data packet.~~

6. (Currently Amended) A ~~latency transmission bandwidth~~ detector for determining a ~~latency bandwidth~~ in data communication, the ~~latency transmission bandwidth~~ detector configured to:

~~determine a transmission time equal to a clock time minus a time stamp associated with a data packet;~~

~~subtract a base time from the transmission time to determine a transmission latency; and~~

~~in response to the transmission latency being less than zero, modify the base time.~~

determine a first time associated with receipt of a first data packet;

determine a second time associated with receipt of a second data packet sent immediately after the first data packet;

determine a size of the second data packet; and

calculate a transmission bandwidth by dividing the size of the second data packet by a function of a difference between the first and second times.

7. (Currently Amended) The latency transmission bandwidth detector of claim 6, wherein the latency transmission bandwidth detector ~~is a program~~ includes computer instructions on a computer readable medium configured to be executed by a computer.

8. (Currently Amended) The latency transmission bandwidth detector of claim 6, wherein the latency transmission bandwidth detector is configured to report ~~reports the transmission-latency bandwidth to a server computer-packet receiver.~~

9. (Currently Amended) The latency transmission bandwidth detector of claim 6, wherein the data packets are two ~~is one~~ of a plurality of data packets that collectively provide a streaming media presentation.

10. (Currently Amended) The latency transmission bandwidth detector of claim 6, ~~additionally comprising a modem for receiving the data packet wherein the~~ function of the difference between the first and second times is the time interval between the first and second times plus a correction factor selected as a function of the size of the second data packet.

11. (Currently Amended) ~~An electronic device for determining network conditions, the device comprising:~~

~~means for determining a transmission time equal to a clock time minus a time stamp associated with a data packet;~~

~~means for subtracting a base time from the transmission time to determine a transmission latency; and~~

means for modifying the base time in response to the transmission latency being less than zero.

The transmission bandwidth detector of claim 6, wherein the transmission bandwidth detector is further configured to read a header in the first data packet, wherein the header includes data indicating the second data packet will be transmitted immediately after transmission of the first data packet to make the first and second data packets back-to-back data packets.

12. (Currently Amended) ~~The electronic device of claim 11, transmission bandwidth detector of claim 6, wherein determining the transmission time includes:~~

~~means for reading the timestamp included in the data packet, wherein the timestamp is associated with when the data packet was sent; and~~

~~means for modifying the time of the timestamp to account for any clock skew, wherein the function of the difference between the first and second times comprises a time interval between receipt of the first data packet and the second data packets plus a correction factor selected to compensate for an impreciseness of time obtained from an operating system.~~

13. (Currently Amended) ~~The electronic device of claim 11, additionally comprising means for reporting to a software module the transmission latency. The transmission bandwidth detector of claim 12, wherein the correction factor selected to compensate for the impreciseness of time is one of at least two time durations selected as a function of the size of the second data packet.~~

14. (Currently Amended) ~~The electronic device of claim 11, wherein the data packet is one of a plurality of data packets that collectively comprise a portion of a media presentation rendered to a user. The transmission bandwidth detector of claim 13, wherein the correction factor is 60 milliseconds if the size of the second data packet~~

is less than or equal to 500 bytes or 40 milliseconds if the size of the second data packet is greater than 500 bytes.

15. (Cancelled)

16. (Currently Amended) A system comprising:

a computer comprising:

a packet receiver operable to receive ~~[[a]]data-packet~~ packets via a network; and

a ~~latency~~ transmission bandwidth detector operable to:

determine a ~~transmission first~~ time equal to a clock time minus a time stamp associated with the corresponding to receipt of a first data packet;

~~subtract a base time from transmission time to determine a transmission latency; and~~

~~modify the base time in response to the transmission latency being less than zero.~~

determine a second time corresponding to receipt of a second data packet sent immediately after the first data packet;

determine a size of the second data packet; and

calculate a transmission bandwidth by dividing the size of the second data packet by a function of a difference between the first and second times.

17. (Currently Amended) The system of claim 16, wherein the ~~latency~~ transmission bandwidth detector is configured to report ~~reports~~ the transmission ~~latency~~ bandwidth ~~to the packet receiver~~ a server.

18. (Currently Amended) The system of claim 16, wherein the ~~data packet is one~~ first and second data packets are two of a plurality of data packets that collectively provide a streaming media presentation.

19. (Currently Amended) The system of claim 16, ~~additionally~~ further comprising:

a modem for receiving the ~~data packet~~ packets.

20. (Currently Amended) A computer readable storage medium storing a program that, when executed by a computer, causes the computer to:

~~determine a transmission time equal to a clock time minus a time stamp associated with a data packet;~~

~~subtract a base time from the transmission time to determine a transmission latency; and~~

~~modify the base time in response to the transmission latency being less than zero.~~

determine a first time associated with receipt of a first data packet;

determine a second time associated with receipt of a second data packet sent immediately after the first data packet;

determine a size of the second data packet; and

calculate a transmission bandwidth by dividing the size of the second data packet by a function of a difference between the first and second times.

21. (Currently Amended) The program storage device-computer readable storage medium of claim 20, wherein, ~~to determine the transmission time~~, the program, when executed by the computer, causes the computer to:

~~read the timestamp included in the data packet, wherein the timestamp is associated with when the data packet was sent; and~~

~~modify the time of the timestamp to account for any clock skew.~~

report the transmission bandwidth to a server computer.

22. (Currently Amended) The program storage device-computer readable storage medium of claim 20, wherein the program, when executed by the computer, further causes the computer to report to a software module the transmission latency wherein the data packets are two of a plurality of data packets that collectively provide a streaming media presentation.

23. (Currently Amended) The computer readable storage medium of claim 20, ~~wherein, to determine the transmission time~~, the program, when executed by the computer, causes the computer to read the timestamp included in the data packet, wherein the timestamp is associated with when the data packet was sent wherein the function of the difference between the first and second times is the time interval between the first and second times plus a correction factor selected as a function of the size of the second data packet.

24. (Currently Amended) The computer readable storage medium of claim 23 20, wherein, ~~to determine the transmission period transmission time~~, the program, when executed by the computer, causes the computer to ~~subtract the timestamp from a timestamp associated with when the data packet was received~~ read a header in the first data packet, wherein the header includes data indicating the second data packet will be transmitted immediately after transmission of the first data packet to make the first and second data packets back-to-back data packets.

25-52. (Cancelled)

53. (New) The method of claim 1, wherein the function of the difference between the first and second times comprises a time interval between receipt of the first data packet and the second data packets plus a correction factor selected to compensate for an impreciseness of time obtained from an operating system.

54. (New) The method of claim 53, wherein the correction factor selected to compensate for the impreciseness of time is one of at least two time durations selected as a function of the size of the second data packet.

55. (New) The method of claim 54, wherein the correction factor is 60 milliseconds if the size of the second data packet is less than or equal to 500 bytes or 40 milliseconds if the size of the second data packet is greater than 500 bytes.

56. (New) The system of claim 16, wherein the function of the difference between the first and second times is the time interval between the first and second times plus a correction factor selected as a function of the size of the second data packet.

57. (New) The system of claim 16, wherein the transmission bandwidth detector is further configured to read a header in the first data packet, wherein the header includes data indicating the second data packet will be sent immediately after sending the first data packet.

58. (New) The system of claim 16, wherein the first and second data packets are back-to-back data packets.

59. (New) The system of claim 16, wherein the function of the difference between the first and second times includes a length of time between receipt of the first data packet and receipt of the second data packet.

60. (New) The system of claim 16, wherein the function of the difference between the first and second times includes a correction factor selected to compensate for impreciseness of the first and second times reported by an operating system.

61. (New) The system of claim 16, wherein the function of the difference between the first and second times includes a length of time duration between receipt of the first data packet and the second data packet, plus a correction factor selected to compensate for impreciseness of time obtained from an operating system.

62. (New) The system of claim 61, wherein the correction factor is one of at least two time durations selected as a function of the size of the second data packet.

63. (New) The system of claim 62, wherein the correction factor is 60 milliseconds if the size of the second data packet is less than or equal to 500 bytes, or 40 milliseconds if the size of the second data packet is greater than 500 bytes.

64. (New) The computer readable storage medium of claim 20, wherein the function of the difference between the first and second times comprises a time interval between receipt of the first data packet and the second data packets plus a correction factor selected to compensate for an impreciseness of time obtained from an operating system.

65. (New) The computer readable storage medium of claim 64, wherein the correction factor selected to compensate for the impreciseness of time is one of at least two time durations selected as a function of the size of the second data packet.

66. (New) The computer readable storage medium of claim 65, wherein the correction factor is 60 milliseconds if the size of the second data packet is less than or equal to 500 bytes or 40 milliseconds if the size of the second data packet is greater than 500 bytes.